(1) Suppose there are 100 million TV viewers in the US. According to a poll, 20 million people watch The Sopranos. 13 million people watch Numb3rs, but don’t watch The Sopranos. There are 25 million people who watch either The Sopranos or Numb3rs (but not both).

(a) How many people watch both shows, The Sopranos and Numb3rs?
(b) How many people don’t watch either show?
(c) Draw a diagram resembling the attribute circles that represents the viewers of each show. Write an English sentence describing each piece of the picture in terms of the viewers.

(2) A bag contains 50 geometric figures, squares and triangles, which come in two colors, green and yellow. There are 30 triangles; 20 green figures; and 10 yellow squares. How many blue triangles are in the bag?

(3) A rock festival was attended by 60,000 youngsters; 37,000 boys; 30,000 barefooted; 16,000 barefoot boys; 26,000 listening to the music; 7,000 barefoot listeners; 17,000 boys listening; and 8,000 barefoot girls not listening. How many girls were there who wore shoes but weren’t listening?

(4) Write an essay expanding on your negative experiences in your math classes. Describe one or two such experiences in detail. What made them negative? What did you do, and what did the teacher do to make them negative experiences? How can you use this experience in your future teaching?

(5) (Extra credit; partial credit for effort and good ideas) How large were my odds in the birthday bet last Wednesday? Was it a fair bet?